



UNITED STATES PATENT AND TRADEMARK OFFICE

AL

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/921,993

08/02/2001

David J. Scarborough

5437-60780

6882

24197 7590 05/21/2007
KLARQUIST SPARKMAN, LLP
121 SW SALMON STREET
SUITE 1600
PORTLAND, OR 97204

EXAMINER

WONG, LUT

ART UNIT

PAPER NUMBER

2129

MAIL DATE

DELIVERY MODE

05/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/921,993

Applicant(s)

SCARBOROUGH ET AL.

Examiner

Lut Wong

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-12,15,17,21-23,25-30,32-34,37,40,41 and 43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-12,15,17,21-23,25-30,32-34,37,40,41 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>9/26/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is responsive to an AMENDMENT entered Aug 28, 2006 for the patent application 09/921993

The non-final Office Action of Nov 22, 2005 is fully incorporated into this Office Action by reference.

Status of Claims

Claims 1-2, 5-12, 15, 17, 21-23, 25-30, 32-34, 37, 40-41, 43 are pending. Claims 1, 2, 25, 37, 41 have been amended.

Acknowledgements

The examiner acknowledges the presentation of claims defining same patentable Invention.

Claim Objections

Claim 40 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 40 is directed to an apparatus, which fails to further limit the functionality of the computer readable medium of claim 25.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22, 41, 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites "protected group of persons". It is not clear what "protected group" means.

Claim 41 recites "an apparatus" without any physical structure recited in the claim. Hence, the scope of the apparatus cannot be defined.

Claim 43 recites "information transfer technique". It is not clear what that technique is.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirby et al ("An Analysis of Applying Artificial Neural Networks for Employee Selection" AMCIS 1998), and further in view of Decision Point Data, Inc ("1999 StoreWorks! Conference and Exhibition" May 1999. Refer herein as DPD).

Response to Arguments

Applicant's arguments, see pg 10-12, filed May 22, 2006, with respect to the rejection(s) of claim(s) 1, 2, 5-12 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Decision Point Data, Inc.

EN: 1) although applicant mentioned 102(e) in pg. 10 of the remark, it is interpreted to mean 102(b). 2) even though DPD is predecessor of Unicru, Inc (the assignee of instant application), DPD reference are still applicable under 102(b) date.

Claims 1 and 2, Kirby teaches a method and computer readable medium to train a NN model for employee selection (See the rejection on the previous office action.) Kirby fails to particularly call for collecting data directly on an electronic device because Kirby is silent about how the data is collected.

However, DPD teaches collecting data directly on an electronic device (See slide 3 of DPD). Kirby and DPD are in the same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine both teachings. One would have been motivated to do so because electronic application and profiling systems are more efficient (See slide 2 of DPD).

Dependent **Claims 5-12** are addressed in the previous office action.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-17, 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirby et al ("An Analysis of Applying Artificial Neural Networks for Employee

Selection" AMCIS 1998), as set forth in the previous office action for reason of record.

Response to Arguments

Applicant's arguments filed May 22, 2006 with respect to 102(b) objections on Claims 15, 17, 21-22 have been fully considered but they are not persuasive.

In re pg. 12, applicant argues that the word "type" was read out of the claim and Kirby fails to describe different types of neural networks.

In response, EN: ¶1 applies. Under such consideration, different neural networks read on different types; i.e., when the architecture of the NN or the weight of a neuron is different, it is considered to be a different type. Besides, Kirby does anticipate different AI models such as Neural Networks, stochastic methods, and/or deterministic optimization techniques (see e.g. pg. 76 of Kirby).

Dependent claims 17, 21-22 are addressed in the previous office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 25-30, 32-34, 37, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirby et al ("An Analysis of Applying Artificial Neural

Networks for Employee Selection” AMCIS 1998), and further in view of Kaak et al (“The weighted Application Blank” Apr 1998).

Response to Arguments

Applicant’s arguments, see pg. 12-14, filed May 22, 2006, with respect to the rejection(s) of claim(s) 23, 25 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kaak et al.

EN: 1) although applicant mentioned claim 42 in pg. 14 of the remark, it is treated as a typo and intended to mean claim 41.

Claim 23 and 37, Kirby teaches recognizing patterns even in the case of noisy data (See the rejection on the previous office action.) Kirby fails to particularly call for removing ineffective data. However, Kaak teaches removing ineffective questions (See e.g. Kaak pg. 20). Kirby and Kaak are in the same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine both teachings. One would have been motivated to do so because 1) data selection is well known in the art to reduce error. 2) removing ineffective questions helps minimizing the likelihood of developing a scoring key that discriminates against protected applicant groups (See e.g. Kaak pg. 20).

Claim 25 and 41, Kirby teaches job effective criteria (See the rejection on the previous office action.) Kirby fails to particularly call for tenure, number of accidents .. etc as amended. However, Kaak teaches job tenure as prediction criterion (See e.g. Kaak pg. 20). Kirby and Kaak are in the same field of endeavor. It would have been

Art Unit: 2129

obvious to one of ordinary skill in the art at the time the invention was made to combine both teachings. One would have been motivated to do so because 1) Kirby clearly states that a NN model can be used to predict more than one performance appraisal variable (See pg. 3 of Kirby). 2) tenure, number of accidents...etc are just some of the performance variable can be used.

Dependent claims 26-30, 32-34, 43 are addressed in the previous office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Kirby et al ("An Analysis of Applying Artificial Neural Networks for Employee

Selection" AMCIS 1998) in view of Kaak et al ("The weighted Application Blank"

Apr 1998) as applied to claim 25 above, and further in view of Decision Point Data,

Inc ("1999 StoreWorks! Conference and Exhibition" May 1999. Refer herein as
DPD).

Response to Arguments

Applicant's arguments, see pg. 14, filed May 22, 2006, with respect to the rejection(s) of claim(s) 40 under 102(b) have been fully considered and are persuasive.

Art Unit: 2129

Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of DPD and Kaak et al.

Claim 40, see the claim objection above. The combination of Kirby and Kaak fail to particularly call for collecting data directly on an electronic device because Kirby is silent about how the data is collected. However, DPD teaches collecting data directly on an electronic device (See slide 3 of DPD). Kirby, Kaak, and DPD are in the same field of endeavor. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine both teachings. One would have been motivated to do so because electronic application and profiling system is more efficient (See slide 2 of DPD).

Examiner Note (EN)

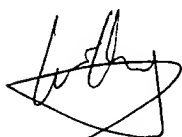
¶ 1 : The claims and only the claims form the metes and bounds of the invention. Limitations appearing in the specification but not recited in the claim are not read into the claim. The Examiner has full latitude to interpret each claim in the broadest reasonable sense. There is no mention of these limitations in the claims and the specification is not the measure of the invention. Therefore, limitations contained therein can not be read into the claims for the purpose of avoiding the prior art; see In re Sprock, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1968).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lut Wong whose telephone number is (571) 270-1123. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent David can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lut Wong
Patent Examiner



DAVID VINCENT
SUPERVISORY PATENT EXAMINER